

What is Claimed is:

- Sub B1
1. A method for testing a communication network, comprising:
transmitting a first signal from a first point to a second point of said communication network, wherein said first and said second points are remotely located;
recording a first time value of said transmitting using a first clock;
receiving a second signal at said second point of said communication network;
and
recording a second time value of said receiving using a second clock, wherein said first clock and said second clock operate from a substantially similar reference.
 2. The method of claim 1, further comprising comparing said first signal and said second signal as a function of said first and second time values.
 3. The method of claim 2, further comprising determining at least one performance characteristic of said communication network based on said comparing.
 4. The method of claim 3, wherein said performance characteristic includes at least one of the following: signal delay, signal distortion, signal duplication, signal intensity, and signal-to-noise ratio.

- Sub B1
5. The method of claim 1, further comprising generating a reference signal using a Stratum-2 oscillator.
 6. The method of claim 5, further comprising providing said reference signal to said first and second clocks.
 7. The method of claim 1, wherein said first point of said communication network is a customer premise equipment.
 8. The method of claim 1, wherein said second point of said communication network is a customer premise equipment.
 9. The method of claim 1, wherein said first point of said communication network is a device within a first central office.
 10. The method of claim 1, wherein said second point of said communication network is a device within a second central office.
 11. The method of claim 1, further comprising receiving a clock signal at said first and second clocks.

Sub B17 12. The method of claim 11, wherein said clock signal is received from a satellite.

13. A system for testing a communication network, comprising:

a signal generator for providing a first signal to said communication network;

a first clock device coupled to said signal generator, wherein said first clock device records a first time said first signal is provided to said communication network;

a signal receiver for receiving a second signal from said communication network;

and

a second clocking device coupled to said signal receiver, wherein said second clock device records a second time said second signal is received from said communication network;

wherein said first and second clocking devices operate from a substantially similar reference.

Sub B17 14. The system of claim 13, further comprising a clock signal in communication with said first and second clocking devices such that said first and second clocking devices operate from a substantially similar reference.

15. The system of claim 14, further comprising a first satellite receiver in communication with said first clock, and a second satellite receiver in communication with said

second clock, wherein said satellite receivers receive said clock signal from a satellite.

16. The system of claim 13, wherein said first and second clocking devices exhibit long-term frequency stability characteristics at least as good as a Stratum-2 level.

17. The system of claim 13, further comprising a first customer premise equipment in communication with said signal generator and said communication network.

18. The system of claim 13, further comprising a second customer premise equipment in communication with said signal receiver and said communication network.

19. The system of claim 13, further comprising a first central office device in communication with said signal generator and said communication network.

20. The system of claim 13, further comprising a second central office device in communication with said signal receiver and said communication network.

add a17